



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,173	08/30/2001	Tsutomu Yamazaki	011350-284	6797

7590 04/29/2005

Platon N. Mandros
BURNS, DOANE, SWECKER & MATHIS, L.L.P.
P.O. Box 1404
Alexandria, VA 22313-1404

EXAMINER

LAROSE, COLIN M

ART UNIT	PAPER NUMBER
----------	--------------

2623

DATE MAILED: 04/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,173

Applicant(s)

YAMAZAKI, TSUTOMU

Examiner

Colin M. LaRose

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 December 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-19,22-32,35 and 36 is/are rejected.
- 7) ☒ Claim(s) 7,8,20,21,33 and 34 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Arguments and Amendments

1. Applicant's amendments and arguments filed 17 December 2004, have been entered and made of record.

Response to Amendments and Arguments

2. In view of Applicant's remarks, the previous objection to claims 7 and 8 has been withdrawn.
3. In view of Applicant's amendments, the rejections of claims 14023 under 35 USC § 101 have been withdrawn.
4. Regarding the rejection of claims 1, 14, and 24 under 35 USC § 102(b), Applicant argues (see p. 15 of Applicant's Remarks) that the Honda reference does not disclose the claimed "detecting colors of a first image data." Applicant asserts that Honda's "text data is input as character code, and does not include any color information." Examiner disagrees.

Honda discloses that the characters generated by the character generator 31 are binary bit maps (see p. 8 of Honda). Each element of the bit maps has a value of "1" or "0", corresponding to a monotone image. The bit map memory 3 storing each element of the bit maps necessarily reads, or detects, each incoming element upon transference from the character generator 31. Upon reading (detecting) the value of each element, that value is written in to the memory.

Applicant disputes Examiner's contention that the binary pixels have color, since Honda discloses the characters as binary. However, Examiner believes interpreting Honda's binary pixels as having color is reasonable. In essence, each of Honda's pixels is composed of either of

Art Unit: 2623

two colors – which, in the case of text, are generally black & white. The detected value of each pixel to be written into memory is considered to correspond to a color value. This reading may offend the traditional notion that “black & white is not the same as *color*,” but it is a reasonable interpretation in view of the fact that pixels are representations of color per se.

It should also be noted that the claim merely calls for “detecting colors of a first image data” without doing anything with those colors. The claim specifies that “the first image data ... have approximately equal colors,” but it does not appear that such detected colors are utilized anywhere else in the claim for any purpose.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6, 9, 10, 14-17, 19, 22, 24-30, 32, 35, and 36, are rejected under 35

U.S.C. 102(b) as being anticipated by Translation of Japanese Patent 01-025285A by Honda (“Honda”).

Regarding claims 1, 14, 24, and 27, Honda discloses an image processing device/method/program (figure 2) comprising:

a first color detection means for detecting colors of a first image data by each processing unit (bitmap memory 3 detects the values (“colors”) of the pixels (“processing units”) generated by the character generator 31);

a second color detection means for detecting colors of a second image data that serves as the first image data's background by each processing unit (image display memory 1 detects the values ("colors") of the pixels ("processing units") generated by the image input unit 10); and

a color adjusting means (overlay pixel determination circuit 2) for specifying a uniform adjusting color that makes the first image data recognizable against all colors of the second image data that serves as the first image data's background, concerning the first image data that have approximately equal colors (page 9 of Honda: circuit 23 determines the color values of the first image that is easiest to view when superimposed on a given background, or second image; page 10 of Honda: "a character scheduled to be overlaid and displayed is automatically colored in such a way that its "viewability" will be maximized in relation to the average density of a certain region designated for the overlay").

Regarding claims 2, 15, 25, and 28, Honda discloses an image processing device/method/program as claimed in claims 1, 14, and 24, further comprising: an image synthesizing means for synthesizing the first image data converted into said adjusting color with said second image data (overlap control circuit 63).

Regarding claims 3, 16, 26, and 29, Honda discloses an image processing device/method/program as claimed in claims 1, 14, and 24, wherein said processing unit is a pixel (see the explanation for claim 1).

Regarding claims 4, 17, and 30, Honda discloses an image processing device/program as claimed in claims 1 and 14, further comprising:

a first memory means (3) for storing the colors of the first image data by each of the approximately equal colors; and

a second memory means (1) for storing the colors of the second image data that serves as the first image data's background said colors of which are correlated to each of the corresponding colors of the first image data that are stored in said first memory means;

wherein said color adjusting means includes an average color value calculating means for calculating an average value of all the colors of the second image data correlated to each of the colors of the first image data (page 5 of Honda: "overlay pixel value determination circuit ... computes the average pixel value (density value) of a certain region [of the background image]"), and an adjusting color calculating means for calculating said adjusting color for each of the colors of the first image data based on each of the colors of the first image data and the average color value of the second image data calculated in correspondence with each of the colors of the first image data (page 5 of Honda: "overlay pixel value determination circuit ... determines the optimal overlay pixel value specific to [the average] density value" – i.e. it determines the optimal color of the characters of the first image based on the average density value of the background and the values of the first image data, which determine which pixels to be colored as such).

Regarding claims 6, 19, and 32, Honda discloses an image processing device/program as claimed in claims 4 and 17, wherein said average color value calculating means calculates the average value of the coordinate values of the colors of the second image data in a specified color system (page 5 of Honda: "overlay pixel value determination circuit ... computes the average pixel value (density value) of a certain region [of the background image]" – this computation is done in the RGB color system).

Art Unit: 2623

Regarding claims 9, 22, and 35, Honda discloses an image processing device/program as claimed in claims 1 and 14, wherein said first image data is an image data that represents character images (character generator 31 generates character images).

Regarding claims 10 and 36, Honda discloses an image processing device as claimed in claim 1, further comprising: a third memory means for storing said second image data (image display memory 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 18, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of U.S. Patent 5,930,385 by Fujimoto et al. ("Fujimoto").

Regarding claims 5, 18, and 31, Honda is silent to a judging means for judging that colors of the first image data are approximately equal when a sum of squares of the differences of their coordinate values in a specified color system is less than a specified value.

Fujimoto discloses an image processing system adapted to perform a color conversion on an input image, such as converting a color image to a monochrome image. Figure 2 shows a method for such conversion. Figure 3 shows the process of region dividing, which is included in the method of figure 2. In dividing the image into color regions, it is determined whether adjacent pixels have the same color at step 2-3. As figure 8 shows, determining whether two

Art Unit: 2623

colors are the same involves determining whether the sum of squares of a difference in color values is less than a threshold.

It would have been obvious to modify Honda by Fujimoto to include means to judge the similarity of input character colors, as claimed, since Fujimoto discloses that generating monochrome input characters (such as taught by Honda by element 31 in figure 2) involves judging the similarity of colors based on the sum of squares of the differences of coordinate values in relation to a threshold.

9. Claims 11-13 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda in view of U.S. Patent 5,872,573 by Adegeest.

Regarding claims 11 and 23, Honda is silent to a file preparing unit for preparing an electronic file based on the image data synthesized by said image synthesizing means.

Adegeest discloses a system for producing legible text to be overlaid on a background, similar to that of Honda. In particular, Adegeest discloses that it is conventional to compile an output image in a file and store the file on a storage device such as a hard disk 46, floppy disk 47, or CD-ROM 28, figure 1.

It would have been obvious to modify Honda by Adegeest to prepare an electronic file of the synthesized image as claimed, since Adegeest shows that it is conventional to store output images in a file on a storage device for future retrieval.

Regarding claim 12, Honda discloses an input device 10, but does not expressly disclose the image device is a scanner, as claimed.

Art Unit: 2623

Adegeest discloses a system for producing legible text to be overlaid on a background, similar to that of Honda. In particular, Adegeest discloses that it is conventional to obtain input images via a scanner.

It would have been obvious to modify Honda by Adegeest to input the second image via a scanner, as claimed, since Adegeest shows that it is conventional to input images with a scanner.

Regarding claim 13, Honda is silent to a printer unit for printing images on recording media based on the image data synthesized by said image synthesizing means.

Adegeest discloses a system for producing legible text to be overlaid on a background, similar to that of Honda. In particular, Adegeest discloses that it is conventional to output processed images via a printer 23, figure 1.

It would have been obvious to modify Honda by Adegeest to output the synthesized image via a scanner, as claimed, since Adegeest shows that it is conventional to output images using a printer.

Allowable Subject Matter

10. Claims 7, 8, 20, 21, 33, and 34 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colin M. LaRose whose telephone number is (571) 272-7423. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au, can be reached on (571) 272-7414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600 Customer Service Office whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2623

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CML
Group Art Unit 2623
16 April 2005



VIKRAM BALI
PRIMARY EXAMINER